Docket No.: FUERTES-LOPEZ

Serial NO.: 10/816,591

## AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

24. (Currently amended) A vaccine for vaccinating a living being against

infections by leishmania, the said vaccine comprising:

a DNA expression construct comprising covalently-closed, linear

deoxyribonucleotide molecules;

said deoxyribonucleotide molecules each comprising a linear double-

stranded region;

said double-stranded region comprising single strands being linked

by short, single-stranded loops of deoxyribonucleic acid nucleotides;

said double strand-forming single strands comprising:

a terminator sequence, and

a coding sequence encoding at least the p36 LACK antigen under

control of a promoter sequence and operable in the living being to be

immunized;

said DNA expression construct being covalently linked to at least one

oligopeptide to increase transfection efficacy;

said at least one oligopeptide comprises 3 to 30 amino acids; at least

half of said amine acids of said at least one oligopeptide are members of a

group comprising arginine and lysine: wherein the vaccine further

comprises at least one oligopoptide consisting of the amino acid sequence

of SEQ ID 3.

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